

Video Activity Packet

for

Grades K-3 and 4-6

Presented by

California Department of Water Resources

Public Affairs Office

"The Water cycle"

Video Activity Packet Contents

· Preactivity for All Grades

- Teacher Instructions
- 6 labels for Prior Knowledge Inventory Chart (6 sheets, each $8\,1/2$ " x 14", single-sided).

• Post Viewing Activity for Grades K-3

- Teacher Instructions
- Student booklet pages (2 sheets, each 8 1/2" x 11", double-sided).

• Post Viewing Activity for Grades 4-6

- Teacher Instructions
- Student mini book (1 sheet, 8 1/2" x 14", single-sided).

Evaluation Forms

- Viewer Evaluation
- Activity Evaluation

Preactivity Teacher Instructions Prior Knowledge Inventory

"KWI" - Know - Want to Know - Learned for "The Water Cycle" video

MATERIALS:

- The 6 labels (provided in packet)
- Butcher paper
- Pen
- · Glue stick

PREPARATION:

- Copy 6 labels (keep originals for future use)
- Teacher prepares "KWL" Chart using butcher paper, glue and labels as shown:

Column #1

Column #2

Column #3

What We Know About The Water Cycle	What We Want To Know About the Water Cycle	What We Learned About The Water Cycle
н		
What We Know About How Water Gets To Us	What We Want To Know About How Water Gets To Us	What We Learned About How Water Gets To Us

Row #2

Row #1

PROCEDURES:

STEP 1

- Teacher elicits responses from students on Row #1 (columns 1 & 2):
 - 1. What they think they know about the water cycle. Teacher records responses.
 - 2. What more they'd like to know about the water cycle. Teacher records responses.

STEP 2

- Teacher elicits responses from students on Row #2 (columns 1 & 2):
 - 1. What they think they know about how water gets to us ready to use. Teacher records responses.
 - 2. What more they'd like to know about how water gets to us ready to use. Teacher records responses.

STEP 3

- TEACHER SHOWS VIDEO
- STEP 4
- The final column #3 (rows #1 + #2) will be completed **after** students complete the Post Viewing Activities.

What We Know About The Water Cycle

What We Want to Know About The Water Cycle

What We Learned About The Water Cycle

What We Know About How Water Gets To Us

What We Want to Know About How Water Gets To Us

What We Learned About How Water Gets To Us

Post Viewing Activity - Teacher Instructions

"The Water Cycle" grades K-3

NOTE

Do the first part of the (KWL) prior knowledge inventory before showing the video. Show entire video in one sitting.

MATERIALS

One copy of booklet per student (2 double-sided 8.5 by 11 inch pages). Crayons or markers. Page 8 Build a water cycle cup - materials needed: cup, water, plastic wrap, rubber band.

BOOKLET PROCEDURES

- 1. Fold copies in half (width-wise) creating a 5.5 by 8.5 inch rectangular booklet. Be sure the pages are in numbered order.
- 2. Have students color booklet cover and write name on the line.
- 3. Show the video a second time and pause after each video experiment to allow students time to record what they saw in their booklets.
- After viewing experiment #1 have students complete page 2 in the booklet.
- After viewing experiment #2 have students complete page 3 in the booklet.
- 6. Have students complete pages 4 and 5 (draw the water cycle) before viewing experiment #3.
- 7. After viewing experiment #3 have students complete page 6.
- 8. On page 7 have students illustrate four ways that they use water and complete a sentence for each use.
- 9. Students will build a water cycle cup. Follow steps 1-4 on page 8. Place the cup in the sun and observe it to see the stages of the water cycle. Have students record observations. It should take about 10-15 minutes for evaporation and condensation to occur.

Note: On a cloudy or cool day put hot water into the cup to promote evaporation.

CLOSURE

- 1. Have students share what they wrote on the pages of their booklets.
- 2. Have the class complete the final column 3 of the KWL inventory chart.

ANSWER KEY FOR BOOKLET:

- Water is stored in rock layers pg. 2
- This is how the water cycle works. pg. 3
- Evaporation from the water source (ocean), condensation in clouds, pg. 4&5 precipitation in the form of rain or snow, and accumulation (label lake or ocean).
- Water is filtered and cleaned before we drink it. pg. 6
- pg. 7 Answers will vary.
- Water cycle cups will show condensation, precipitation (drops), and accumulation. pg. 8

MAKE A WATER CYCLE



1. Pour a small amount of water into the cup.

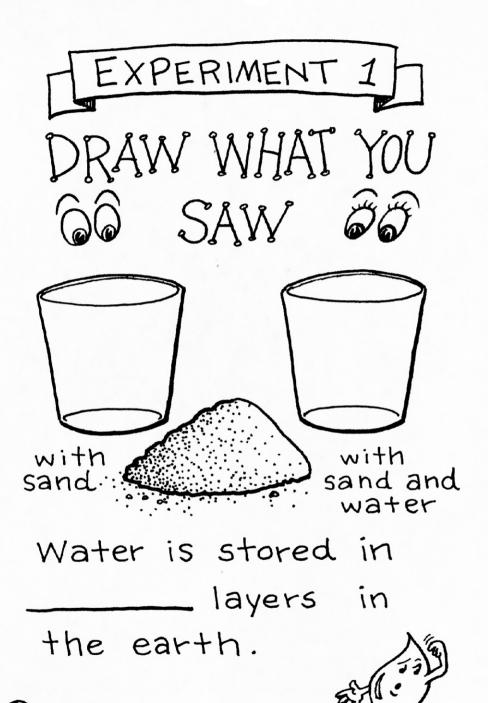
2. Cover the cup with plastic wrap.

3 Put a rubber band over the top to hold the plastic wrap.

4. Put outside in the sun.



NAME



DRAW PICTURES OF WAYS YOU USE WATER

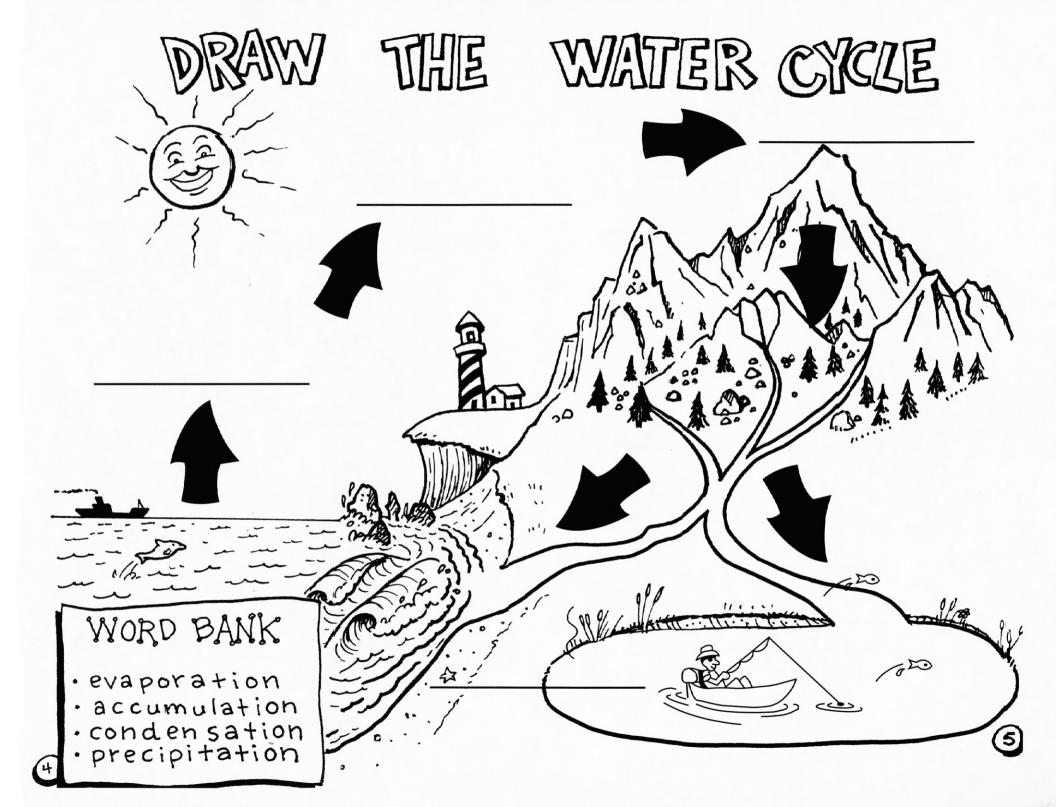
I use water

I use water

I use water

I use water





EXPERIMENT 3 DRAW WHAT YOU SAW

after the

water is

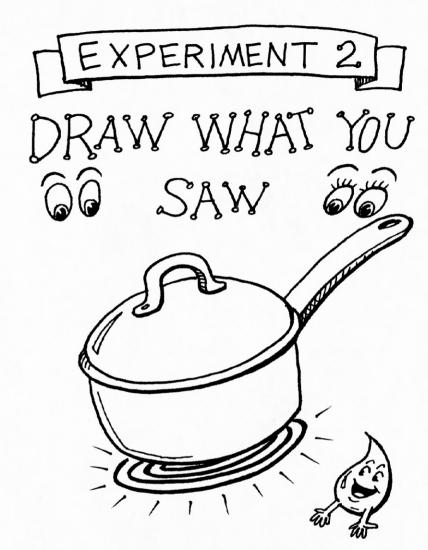
filtered

and cleaned before we drink it.

before the

water is

filtered



This is how the works.



Post Viewing Activity - Teacher Instructions

"The Water Cycle" grades 4-6

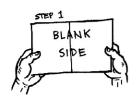
NOTE

Do the first part of the (KWL) prior knowledge inventory before showing the video.

MATERIALS

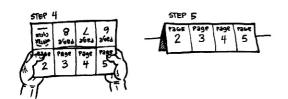
Mini book master, scissors, crayons or markers, pencil.

MINI BOOK PREPARATION

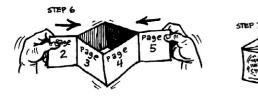




- 1. Copy the mini book master on 8.5 by 14 inch copy paper (1 per student).
- **2.** Fold the mini book in half width wise (this will resemble a square).
- **3.** Cut along the dotted line through both layers of the paper. You will only cut half way into the middle of the square.



- **4.** Open the paper to full size and fold in half length-wise with the printing on the outside.
- **5.** Stand the paper upright on the desk (like a tent) with the open edge at the bottom and pages 2, 3, 4 & 5 facing you.



- **6.** Grab the outside edges of the paper and push gently towards the center creating a 4 sheet booklet.
- 7. Fold together so that the number of pages are in order, and the cover is at the front of the book.

MINI BOOK PROCEDURES

Show the video completely in one sitting. Reshow video pausing after each experiment to allow students time to complete mini book exercises.

- **Page 1.** Students color the cover and write name on the line.
- **Page 2.** Students draw and label the illustration to show groundwater, aquifer, and percolation.
- **Page 3.** Students will fill in blank A with the word evaporation and blank B with the word condensation.
- Page 4. Students will write what they know about the water cycle.

- **Page 5.** Students draw an illustration of the water cycle using words from the word bank.
- **Page 6.** Students color the cups in the book to show the appearance of the water before and after filtering. They answer the question about unsafe water. Ans. "The water contains microorganisms that make you sick".
- **Page 7.** Students sequence the stages of water treatment.

Ans. 4

1 5

2 3

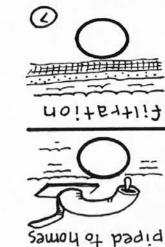
Page 8. The students write what they know about how we get water ready for use.

CLOSURE

- 1. Have the students exchange mini books with a partner, read them to detect any errors, and return them to the owners for revision.
- 2. Teacher collects the mini books and evaluates them.
- 3. Have the class complete the final column 3 of the KWL inventory chart.

HMAN

ready to use. HOW WE GET OUT WATER What I now know about



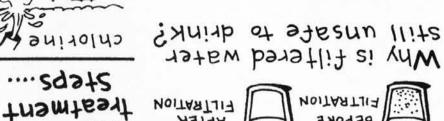
PUVIFICATION (Chlorine added again)



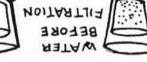
the water

Sequence

coagulation cleaning



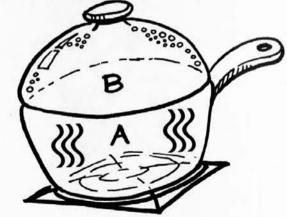
FILTRATION MATER AFTER



EXPERIMENT #3

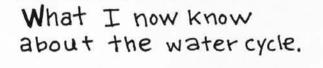


EXPERIMENT *2



A is			
0.52	 -		

B is	
*	3



	 	-

WORD BANK
(BANK)



accumulation condensation precipitation evaporation





· groundwater · aquifer

· percolation

2

Post Viewing Activity /Water Cycle/4-6/1998

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THE CHAMPS NOW	4

### Viewer Evaluation Form

## for "The Water Cycle" Video

To assist the California Department of Water Resources Office of Water Education in future programming, your comments on the video you have just received would be greatly appreciated. Please complete this short evaluation form and fax to Department of Water Resources at (916) 653-4684, attn. Carolyn Tucker or you can mail it to Department of Water Resources, P.O. Box 942836, Sacramento, CA 94236-0001, attn. Carolyn Tucker. Thanks for your help.

Thanks for your help.									
About the video:	(Please circle your answ	ers)							
Grade level specified on video:	a. K-3		4-6						
Was the video:	a. Appropriate for grade level specified	b. Not appropriate							
Do you think the video was:	a. Too long	Ь.	Too s	short	;			c. About ri	ght
Was the video:	a. Easy to understand	Ь.	Hara	tοι	ınder	staı	nd	c. About ri	ght
Did the video have:	a. Too much information	b.	Too I	ittle	infor	mat	ion	c. About ri	ght
On a scale on one to five:									
Was the video:	Boring	1	2	3	4	5	Inte	eresting	
Did students:	Learn very little	1	2	3	4	5	Lea	rn a lot	
Vas the information:	Confusing	1	2	3	4	5	Exp	lained Well	
Were the graphics:	Unclear	1	2	3	4	5	Clea	ar	
Were there:	Too few graphics	1	2	3	4	5	Enc	ough graphic	5
How well did the video fit into									
Curriculum requirements	Bad Fit	1	2	3	4	5	God	od Fit	
What did you like about the vide	o and any other comments	·							
NAME	9CH00L						GI	RADE LEVEL	
ADDRESS	CITY					_ STA	re	ZIP	
PHONE NUMBER									

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## Department of Water Resources

Public Affairs Office 1416 Ninth St. Room 150-4 Sacramento, CA 95814 Attn: Carolyn Tucker

### **Activity Evaluation Form**

"The Water cycle"

In order to better serve California schools we need your feedback on the activity sheets that accompany this video. Please complete this short evaluation form and fax to Department of Water Resources at (916) 653-4684, attn. Carolyn Tucker or you can mail it to Department of Water Resources, P.O. Box 942836, Sacramento, CA 94236-0001, attn. Carolyn Tucker. Thanks for your help.

NAME	SCHOOL						
ADDRESS	CITY	STATE ZIP					
PHONE NUMBER	<del></del>						
PLEASE CIRCLE OR FILL IN THE APPROPI	RIATE ANSWER						
1. Grade level taught:	K 1 2 3 4 5 6 Other						
2. Activity used:	KWL Chart K-3 Booklet	4-6 Mini book					
3. Have you used this activity before?	Yes No						
4. Would you use it again?	Yes No						
5. Using a grading scale:	5 = excellent, 4 = good, 3 = average, 2 = poor, 1 = very poor please rate how well the activity met the following:  Helped to reinforce your student's understanding of the video  Helped to increase your student's knowledge of water  Instructions easy to follow  Interest to your students						
6. Would you recommend this to others? Yes No							
7. How could this activity be improved? (other comments)							
,		8					

### FOLD HERE

## Department of Water Resources

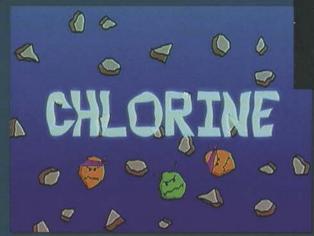
Public Affairs Office 1416 Ninth St. Room 150-4 Sacramento, CA 95814 Attn: Carolyn Tucker pearn.

>>> How the water cycle works

How water is cleaned & purified

>>> How water is delivered to your home





# 3 Exciting Experiments You Can Do that Show:

How water is stored underground

How heat from the sun makes the water cycle work

>>> How gravel & sand can help clean water



